

MACBETH GLASSWARE

for COMMERCIAL
LIGHTING



Macbeth-Evans Glass Company
Charleroi — Pennsylvania

Foreword

Appreciating the fact that the architect is desirous of having at his command a selection of materials and patterns which he can use to add the final touch in bringing the building which he has designed to that state of perfection in which he has conceived it, MACBETH-EVANS GLASS COMPANY offers for the consideration of the architect a complete line of lighting glassware for schools, churches, stores and all other types of public buildings.

Macbeth enclosing globes are available in five distinctly different glasses, namely, Monax, Galax, Cremax, Lumite and Alba. Each of these are physically homogeneous single layer glasses, and, consequently, are as strong mechanically as it is possible to make glass. Since they are single layer glasses they are not subject to the differential expansion strains and the consequent breakage when in service, inherent to the multi-layer (cased) enclosing globes.

An extremely high standard of selection for glass quality as well as for uniformity in weight is maintained at all times. Macbeth Illuminating Glassware is free from such defects as streaks, cords, stones, blisters, checks or other imperfections which will impair the strength and appearance or detract from the general quality. The net result of such a high standard of se-

lection is a uniform installation of attractive appearance and maximum efficiency.

Each type of Macbeth glass possesses desirable illuminating qualities of a very high degree. A trained technical staff, highly specialized in illuminating glassware research, is not only continuously at work seeking to improve Macbeth quality and pioneering into new types of illuminating glasses, but is constantly on the alert to see that improved quality is carefully maintained. As an aid in their work, there is maintained at the Charleroi Works a complete photometric laboratory, the facilities of which are also available to the architect for any special investigations he may desire to have made.

Macbeth enclosing globes further possess the advantages of extremely low depreciation in illuminating efficiency while in service. One piece in construction, they are as nearly dust-tight as is possible to make a lighting unit. Smooth-surfaced initially, since they are especially resistant to weathering attack, they continue to be smooth-surfaced and, accordingly, dust and dirt do not settle upon them to the extent that they do on less resistant glasses. In the latter even a slight weathering film renders the glass surface such that atmospheric dust adheres strongly to the glass and quickly depreciates its illuminating efficiency.



MACBETH LIGHTING GLASSWARE

In each of the several illuminating glasses marketed by MACBETH-EVANS GLASS COMPANY, a certain nicety of balance has been struck between the two important illuminating considerations, efficiency and surface brightness, which enables each glass to fulfill to maximum advantage its particular purpose.

Macbeth Monax is the pioneer white diffusing glass for illuminating purposes. It has through the medium of constant research in the Macbeth Laboratories, maintained its position as the peer in its field. Highly diffusing in character, Monax also possesses maximum lighting efficiency. Each enclosing globe is stamped "Macbeth Monax."

Macbeth Cremax is a patented composition yielding a glass of rich creamy tint. Cremax illumination is of a warm, welcoming quality and is essentially decorative in character. Each enclosing globe is stamped "Macbeth Cremax."

Macbeth Galax Semi-Indirect Lighting Enclosing Globes combine high efficiency with all the desirable eye-protecting qualities of this type of lighting. They are single piece units of physically homogeneous texture, but of dual opacity. The bottom of the globe is of a dense white, highly reflecting opacity, assuring low intrinsic brightness with a high percentage of light directed upward. The top of the globe is of much lighter opacity, but sufficient to eliminate lamp filament striations and shadows on the ceiling and walls. It permits a very high proportion of the upward light to be transmitted without material absorption loss. Macbeth Galax should not be confused with either enameled or cased bottom enclosing globes which are in reality not truly semi-indirect

either in the character of their distribution of the light or in their glare characteristics. The two opacities found in the top and bottom respectively of a Galax globe result from a special manufacturing treatment of a single piece of physically homogeneous glass of patented composition. Because of its permanently high lighting efficiency, simplicity of installation and maintenance, and its inherent strength, Macbeth Galax should find application in every place where the semi-indirect type of lighting can be advantageously used. Each enclosing globe is stamped "Macbeth Galax."

Macbeth Lumite (Crystal) is a clear glass of high lustre. It is extremely resistant to weathering. The present vogue of modernistic lighting has brought with it a certain demand for crystal etched glassware, for which Macbeth Lumite has proven itself unexcelled.

Macbeth Alba is a translucent diffusing glass specially adaptable for manufacture of heavy pressed ware.

These five inherently different types of glass are available in different shapes ranging from conservative commercial to distinct modernistic.

From a variety of decorations, the architect may select one suitable for almost any interior where decorative treatment is desirable. All colors are permanently fired on the globes, thus becoming an inherent part of the glass.

MACBETH-EVANS GLASS COMPANY offers a comprehensive line of lighting glassware embracing a high standard of quality and varied design, coupled with technical assistance. This service has been planned to assure a complete and efficient lighting installation with a minimum expenditure of time and effort on the part of the architect.



The Semi-indirect Hallstadt Galax Glass

INTERPRETATION OF PHOTOMETRIC DATA

When comparing the photometric data for a number of different illuminating enclosing globes, caution should be exercised to make certain:

(1) That the tests have been made under conditions as nearly approaching the actual conditions of installation as possible.

(2) That the test data has been obtained on a sufficient number of pieces of the ware to make the data actually representative of the manufacturers' product.

To assist prospective purchasers of lighting glassware in making an accurate estimate of the merits of enclosing globe lighting units, the Illuminating Engineering Society, the National Electric Light Association and the Illuminating Glassware Guild have sponsored a procedure for testing, known as IES-NELA specifications for testing diffusing type enclosing glassware, which is based on the above considerations.

The photometric data for the glassware represented herein has been obtained in tests made by the Electrical Testing Laboratories, New York City, in accordance with the IES-NELA specifications.

These specifications for testing differ from the procedure commonly used in the past in three important particulars, namely: 1. The method of selecting the samples for test. 2. The position of the light source within the globe. 3. The cover used over the fitter opening of the globe. These aspects are discussed briefly below.

Selection of Samples

A common practice in the past has been to have photometric tests made on a single piece of glass, which in some cases may have been a specially made sample, and the data thus obtained was submitted as being representative of the manufacturers' product. Such data was obviously questionable and at best, altogether incomplete. The IES-NELA specifications provide that the selection of the samples for test be made by a representative of the testing laboratory, and that he shall examine and weigh no less than 25 pieces chosen at random from the lot of ware which is to be inspected. From this group of 25 or more globes thus examined, one globe representing the minimum, one the maximum and four of medium weight (six globes in all), shall be selected and forwarded to the testing laboratory for photometric tests. After determining the transmission efficiency for these six units, the globe which most nearly approaches the average efficiency of the six is further tested for distribution characteristics and brightness

values. The data thus obtained on this average globe is considered to be as nearly representative an estimate of the illuminating qualities of the manufacturers' product as it is readily possible to obtain.

Lamp Position

The position of the light sources within an enclosing globe has a great influence upon the photometric characteristics of the unit. Thus in general the closer the lamp is placed to the bottom of the enclosing globe, the greater the transmission efficiency which is obtained. At the same time, however, the brightness values over the bottom will be increased, thus making the globe less desirable from this standpoint.

Because of these possible variations, the IES-NELA specifications have provided that globes of a given diameter shall be tested with the lamp in prescribed position. Where this position has been deviated from in the test, as it may be advisable to do in the case of an elongated or stalactite shaped globe, this departure must be cited in the test report as an exception.

Cover for Fitter Opening

The resulting illuminating efficiency is likewise influenced by the material used as a cover for the fitter opening of the globe in the test. The cover material adopted as standard in the past was a white blotter having a reflection factor of about 70%. It was recognized that the white blotter reflected more and absorbed less of the light which fell on the fitter opening than would practically all of the canopy materials on the market, but that it did establish a standard on which comparisons could be intelligently based. An investigation of a number of representative canopies disclosed that a material having a reflection factor of 40% more nearly represented the average value for the materials most generally used for fitter canopies. The test report shown herewith gives the values for transmission efficiency under each of these two conditions of test for the same group of globes. The values given under the column heading "Test in Accordance with Specifications" are those obtained using a material of 40% reflection factor, while the figures in the column headed "Exception" are the transmission efficiencies for the same group of globes in a test in which a white blotter was used as the cover material. These two sets of values illustrate very effectively the importance of having photometric tests made under conditions which simulate very closely the actual installation conditions.

SUGGESTED SPECIFICATIONS FOR LIGHTING GLASSWARE OF MACBETH QUALITY

(1) General

This specification outlines the detailed requirements of enclosing globes for use in the (name of building). Enclosing globes will be required for all ceiling outlets. These outlets together with respective lamp sizes are shown in the architect's plans for this building.

(2) Shape and Size of Globe

The globes shall conform in contour to shape exemplified by MACBETH-EVANS GLASS COMPANY'S (name of globe) shown in SWEET'S ARCHITECTURAL CATALOGUES for 1931.

Enclosing globes shall be in accordance with the following schedule of sizes for respective lamp wattages:

Lamp size	Minimum diam. of globe	Lamp size	Minimum diam. of globe
100 watts	10 in.	300 watts	16 in.
150 watts	12 in.	500 watts	18 in.
200 watts	14 in.	750 watts	20 in.

(3) Material

(a) (*Specification for Monax Type Glassware*)—

Glassware to be furnished on this installation shall be of Macbeth Monax or its equivalent. Units shall be of highly diffusing white glass of homogeneous texture throughout.

(a) (*Specification for Galax Type Glassware*)—

Glassware to be furnished on this installation shall be of Macbeth Galax or its equivalent. Units shall be totally enclosed except for fitter opening, and constructed of a uni-layer, physically homogeneous glass in such manner that the bottom of the globe is of a dense white highly reflecting character causing a major portion of the light emitted by the enclosed lamp to be reflected upward according to the semi-indirect lighting principle, while the upper portion of the globe is of a slightly diffusing, highly transmitting character, permitting a large percentage of the upwardly directed light to be transmitted.

(a) (*Specification for Cremax Type Glassware*)—

Glassware to be furnished on this installation shall be of Macbeth Cremax or its equivalent. Units shall be of a rich

creamy tint, highly diffusing glass of homogeneous texture throughout.

(b) All of the glassware supplied shall be uniform in quality and shall be free from such imperfections as streaks, cords, stones, blisters, checks, etc., as will impair the strength or appearance or otherwise detract from the general quality of the glassware for lighting purposes.

(c) Glassware shall be highly resistant to attack by weathering and shall show no sign of disintegration or attack after being immersed in boiling distilled water for two hours.

(d) The glassware shall be mechanically strong.

(e) The glassware shall be properly annealed and free from any internal strains which may cause breakage.

(f) Enclosing globes when suspended from three points shall hang plumb.

(4) Photometric Characteristics

The bidder shall submit data showing results of photometric tests on the glassware which he proposes to supply, made by a competent testing laboratory according to the provisions of the "IES-NELA Specifications for Testing Diffusing Type Enclosing Glassware" or,

If the architect so elects he may require the bidder to submit photometric tests made by a competent Testing Laboratory on samples selected by the architect's representative from the bidder's or manufacturer's warehouse stock, said samples to be selected and tests made exactly in accordance with the "IES-NELA Specifications for Testing Diffusing Type Enclosing Glassware" with the exception that the samples for test shall be selected by the architect's representative instead of a representative of the Testing Laboratory.

Test reports submitted in accordance with either of the

above specifications shall show that the proposed glassware meets the following requirements for illuminating efficiency (ratio of light output of unit to light output of bare lamp) and for surface brightness:

(For Monax Type Glassware.) Efficiency shall be not less than 82%. The maximum surface brightness at any point on the globe in the line of vision when installed shall not exceed 4 candle power per sq. in.

(For Galax Type Glassware.) The efficiency shall be not less than 75%. The maximum surface brightness at any point on the globe in the line of vision when installed shall not be in excess of 2 candle power per sq. in. It is further specified that the distribution of the light shall be such that not more than 25% of the light output of the bare lamp shall be directed below the horizontal plane passing through the lamp filament.

(For Cremax Type Glassware.) The efficiency shall be not less than 65%. The maximum surface brightness at any point on the globe in the line of vision when installed shall not be in excess of 3 candle power per sq. in.

(5) Inspection

All globes delivered for this installation will be subject to inspection by the architect or his representative and if any are found not to conform to these specifications, the entire lot or any individual globe may be rejected.

(6) Types of Globes and Locations

(Under this heading the architect should include in either list or table form the selected types of globes and the locations in which they are to be installed. For data on code numbers which will assure the proper style, size, decoration, etc., see "To Specify" for each type of globe illustrated on the following pages.)

SOME USERS OF MACBETH LIGHTING GLASSWARE AND SOME TYPICAL INSTALLATIONS

Schools

Duke University
Durham, N. C.
West Gray Elementary School
Houston, Tex.
Germantown Academy
Germantown, Pa.
St. Peter's Seminary
London, Ont.

Connecticut College for Women
New London, Conn.
Glendale Union High School
West Glendale, Cal.
East Orange Junior High School
East Orange, N. J.
McKinley High School
St. Louis, Mo.

Monax glass has been used in a great many of the public schools of New York City, Cleveland, Detroit and Los Angeles.

Cremax glass has been installed in the group of new

Wesleyan College buildings at Macon, Ga.—Laurel School, Shaker Heights, Cleveland—Baldwin Wallace College, Berea, Ohio—and some of the buildings in the Detroit University, Detroit, Mich.

Office Buildings, Hospitals, Hotels, and Churches

National Life Building
Toronto, Ont.
Palmolive Building
Chicago, Ill.
Ross S. Sterling Building
Houston, Tex.
Shaker Square Group
Shaker Heights,
Cleveland, Ohio
Provincial Parliament Building
Toronto, Ont.
Merchants National Bank Building
Mobile, Ala.
State Capitol
Harrisburg, Pa.
Paramount Hotel
New York, N. Y.

St. Cecilia's Church
Louisville, Ky.
Medical Arts Building
Columbus, Ohio
Boston Store
Milwaukee, Wis.
Mt. Sinai Hospital
Cleveland, Ohio
American Women's Association Building
New York, N. Y.
Benjamin Franklin Hotel
Seattle, Wash.
Toronto General Hospital
Toronto, Ont.
Medical Arts Building
Chattanooga, Tenn.

SIMPLIFIED ILLUMINATION CALCULATION PROCEDURE FOR MACBETH ILLUMINATING GLASSWARE

First

Determine foot candles required from Table I.

Second

Determine "Conditions Factor" for the interior, whether "Favorable," "Average" or "Unfavorable," from Table II, following page. The "Conditions Factor" will depend upon the room proportions, color of ceiling and upper walls, and the maintenance of equipment. Typical "Average Conditions Factor" consists of:

Room proportions.....

Width approximately twice ceiling height

Color of ceiling and walls.....Medium

Maintenance of equipment.....Fair

The "Conditions Factor" becomes more "favorable" as the width of the interior increases in proportion to its height; as the color of ceiling and upper walls becomes lighter; and as the maintenance of equipment improves.

Third

Decide which type of illuminating glassware (Monax, Galax or Cremax) is desired.

Fourth

Decide mounting height. Ordinarily, an overall fixture length (ceiling to underside of enclosing globe) of one-fourth ceiling height may be used for all Macbeth enclosing globes. Ceiling type fitters should be used on low ceilings.

Fifth

Locate in first column, Table II, the contemplated "Area Per Outlet" or "Approximate Spacing" and further narrow this down to the "Conditions Factor" determined in second step. Then traverse Table II horizontally to the right until the desired foot-candle intensity (as determined in first step) is located in the correct glassware section. If not so found, then go to a closer spacing until desired foot-candle intensity is located. Directly above in the column heading is the required lamp size.

TABLE I. LIGHTING INTENSITIES FOR GENERAL ILLUMINATION OF COMMERCIAL INTERIORS

Specific Commercial Interiors	Foot-Candles		Specific Commercial Interiors	Foot-Candles	
	Recommended	Minimum		Recommended	Minimum
Auditoriums.....	5	3	Lunch Room.....	12	8
Automobile Show Rooms.....	15	10	Market.....	12	8
Bank Lobby.....	10	6	Office Buildings		
Barber Shop.....	15	10	Private and General.....	15	10
Churches			Same—no close work.....	10	8
Auditorium.....	3	2	File Room.....	6	4
Sunday School Room.....	8	5	Corridors.....	5	3
Club Rooms			Restaurants.....	8	5
Lounge.....	5	3	Schools		
Reading Room.....	12	8	Auditorium.....	8	5
Court Rooms.....	10	6	Class Rooms, Library and Office...	12	8
Dance Halls.....	6	4	Corridors and Stairways.....	5	3
Depot Waiting Room.....	8	5	Drawing Rooms.....	25	15
Drafting Room.....	25	15	Manual Training.....	12	8
Gymnasiums			Laboratories.....	12	8
Main Exercising Floor.....	12	8	Sewing Rooms.....	25	15
Swimming Pool.....	8	5	Study.....	12	8
Shower and Locker Rooms.....	6	4	Stores—Department and Large		
Halls, Passageways in Interiors.....	3	2	Specialty		
Hospitals			Main Floors.....	15	10
Corridors.....	3	2	Basement Store.....	15	10
Private Rooms.....	8	5	Other Floors.....	12	8
Wards (with local illumination)....	5	3	Stores—Medium Size		
Laboratories.....	15	10	Clothing.....	15	10
Hotels			Drug.....	15	10
Lobby.....	8	5	Dry Goods.....	15	10
Dining Room.....	6	4	Grocery.....	12	8
Bed Rooms.....	8	5	Furniture.....	15	10
Corridors.....	3	2	Shoe.....	15	10
Library			Confectionery.....	12	8
Reading Rooms.....	12	8	Meat.....	12	8
Lodge Rooms.....	6	4	Toilet and Wash Rooms.....	6	4

TABLE II. DETERMINATION OF LAMP SIZE AND OUTLET SPACING

Using the proper section for glassware selected, the mounting height* and conditions factor decided upon, choose such spacing and lamp size as will give the desired foot-candle intensity	Area per outlet† or approximate spacing	Conditions factor	Macbeth Monax					Macbeth Cremax					Macbeth Galax For semi-indirect lighting				
			Average foot-candles					Average foot-candles					Average foot-candles				
			100-watt	150-watt	200-watt	300-watt	500-watt	100-watt	150-watt	200-watt	300-watt	500-watt	100-watt	150-watt	200-watt	300-watt	500-watt
Favorable Average	55 to 65 sq. ft. or 7 3/4 x 7 3/4 ft. spacing	8-10 6-7 4-5	12-15 9-12 6-8	18-23 12-16 9-11	15-20 11-15 7-9	18-25 12-18 8-12		5-7 3-5 2.5-3.0	9-12 6-9 4-6	13-18 8-13 5-8			7-9 5-6 3-4	10-14 7-10 4-6	15-22 11-15 7-9		
Favorable Average	65 to 75 sq. ft. or 8 1/2 x 8 1/2 ft. spacing	7-8 5-0-5.5 3-0-3.5	11-15 8-11 5-7	15-20 11-15 7-9	13-18 10-13 5-6	18-25 12-18 8-12		4-6 3-4 2-3	8-11 5-8 3.5-5.0	11-15 7-11 5-7			6-7 4.5-5.0 2.5-3.0	9-13 6-9 4-6	13-19 9-13 6.5-8.0		
Unfavorable	75 to 85 sq. ft. or 9 x 9 ft. spacing	6-7 4.5-5.0 3-0-3.5	10-13 7-10 5-6	13-18 10-13 6-8	11-16 8-10 6-7	18-25 12-18 8-12		3.5-5.0 2.5-3.5 1.5-2.5	7-9 4-7 3-4	8-12 6-8 4-6			5-6 4.0-4.5 2.5-3.0	8-11 5-8 3.5-5.0	11-17 8-11 6-7		
Favorable Average	85 to 95 sq. ft. or 9 1/2 x 9 1/2 ft. spacing	4-5-6.0 4-0-4.5 2.5-3.0	8-11 6-8 4-5	11-16 8-10 6-7	10-14 7-9-5.0 5-6	18-25 12-18 8-12		3-4 2-3 1.5-2.0	6-8 4-6 2.5-4.0	8-11 5-8 4-5			4.0-5.5 3.5-4.0 2.0-2.5	7-10 5-7 3-4	10-14 7-9 5-6		
Unfavorable	95 to 110 sq. ft. or 10 x 10 ft. spacing	4-0-5.5 3.5-4.0 2.0-2.5	7-10 5-7 3-4	10-14 7-9-5.0 5-6	9-12 7-0-8.5 4.5-5.5	16-22 11-16 7-10		3.0-3.5 2.0-2.5 1.5-2.0	5-7 3-5 2.5-3.0	7-10 5-7 3.5-5.0			3.5-5.0 3.0-3.5 1.5-2.0	6-9 4.5-5.0 2.5-4.0	9-12 6-8 4.5-5.0		
Favorable Average	110 to 125 sq. ft. or 11 x 11 ft. spacing	4-5 3-0-3.5 2-0-2.5	6-9 4.5-6.0 3-4	9-12 7-0-8.5 4.5-5.5	14-20 10-14 7-9	16-22 11-16 7-10		2.5-3.5 1.5-2.0 1.0-1.5	4-6 3-4 2-3	6-9 4-6 3-4			3-4 2.5-3.0 1.5-2.0	5-7 4.5-5.0 2.5-4.0	8-11 5-7 4.0-4.5		
Unfavorable	125 to 145 sq. ft. or 11 1/2 x 11 1/2 ft. spacing	3-5-4.5 2.5-3.5 1.5-2.0	5-5-8.0 4.5 2.5-3.5	8-11 6.5-8.0 4-5	12-17 9-13 6-8	16-22 11-16 7-10		2-3 1.0-1.5	3.5-5.0 2.5-3.5 1.5-2.5	5-7 3.5-5.0 2.5-3.5			2.5-3.5 2.0-2.5 1.0-1.5	3-4 2.5-3.0 1.5-2.0	7-9 5-6 3.5-4.0		
Favorable Average	145 to 170 sq. ft. or 12 1/2 x 12 1/2 ft. spacing	3-4 2-0-2.5 1-0-1.5	5-6 3.5-4.0 2-3	7-10 6-7 3.5-4.0	10-15 8-10 5-7	18-25 12-18 8-12		.....	3.5-4.0 2.0-3.5 1.5-2.0	4-6 3-4 2-3			2-3 1.5-2.0	3-4 2.5-3.0 1.5-2.0	6-8 4.5-5.0 3.5-4.0		
Unfavorable	170 to 200 sq. ft. or 13 1/2 x 13 1/2 ft. spacing	2-3 1.5-2.0 1-0-1.5	4-5-5.5 3-0-3.5 2-0-2.5	6-8 5-6 3-0-3.5	9-12 6-9 4-6	16-22 11-16 7-10		.....	3.5-4.0 2.0-3.5 1.5-2.0	4-6 3-4 2-3			2-3 1.5-2.0	3-4 2.5-3.0 1.5-2.0	6-8 4.5-5.0 3.5-4.0		
Favorable Average	200 to 230 sq. ft. or 14 3/4 x 14 3/4 ft. spacing	4-5 2.5-3.0 1.5-2.0	4-5 3-0-3.5 2-0-2.5	6-8 5-6 3-0-3.5	9-12 6-9 4-6	16-22 11-16 7-10		.....	3.5-4.0 2.0-3.5 1.5-2.0	4-6 3-4 2-3			2-3 1.5-2.0	3-4 2.5-3.0 1.5-2.0	6-8 4.5-5.0 3.5-4.0		
Unfavorable	230 to 260 sq. ft. or 15 1/2 x 15 1/2 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Favorable Average	260 to 300 sq. ft. or 16 3/4 x 16 3/4 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Unfavorable	300 to 340 sq. ft. or 18 x 18 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Favorable Average	340 to 390 sq. ft. or 19 x 19 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Unfavorable	390 to 440 sq. ft. or 20 1/2 x 20 1/2 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Favorable Average	440 to 500 sq. ft. or 21 3/4 x 21 3/4 ft. spacing	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		
Unfavorable	.....	.....	.....	.....	.....	.....		.....	.....	.....			.....	.....	.....		

*Note: Ordinarily units may be mounted using an over-all fixture length equal to one-fourth the ceiling height. For low ceilings fixtures of the ceiling type should be used.

†Note: Between walls and first rows of lights allow not more than 1/2 in. spacing.

"The Modernistic"

The "Modernistic" displays modern French influence combined with the popular reverse "set back." The design is restrained in form and decoration, without bizarre characteristics and is thus suitable for use in almost any location.

In the table below the number D-144 indicates a gray fired color tint applied to the elaboration in Monax glass. On Cremax glass the same number indicates a brown fired tint. "Art Moderne" indicates a crystal glass having a satin finished background with the relief in crystal high lights.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description" for the particular globe desired. This will automatically assure the selected style, size, color, glass and decoration. For example, "Macbeth Modernistic 5698 D-144 Cremax" will designate the design shown in Cremax glass with a brown fired color tint applied to the decoration of a globe 6 in. in diameter, 9½ in. in depth with a fitter 4 in. in diameter.

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position	Recommended wattage
5698	D-144 Cremax	6	9½	4	1 in. above	100
5695	D-144 Cremax	8½	13½	6	½ in. above	150
5980	D-144 Cremax	10	16½	6	¼ in. below	200
5696	D-144 Cremax	12	20	8	1 in. below	300
5697	D-144 Cremax	16	27	12	3 in. below	500
5698	Art Moderne	6	9½	4	1 in. above	100
5695	Art Moderne	8½	13½	6	½ in. above	150
5980	Art Moderne	10	16½	6	¼ in. below	200
5696	Art Moderne	12	20	8	1 in. below	300
5697	Art Moderne	16	27	12	3 in. below	500
5698	D-144 Monax	6	9½	4	1 in. above	100
5695	D-144 Monax	8½	13½	6	½ in. above	150
5980	D-144 Monax	10	16½	6	¼ in. below	200
5696	D-144 Monax	12	20	8	1 in. below	300
5697	D-144 Monax	16	27	12	3 in. below	500

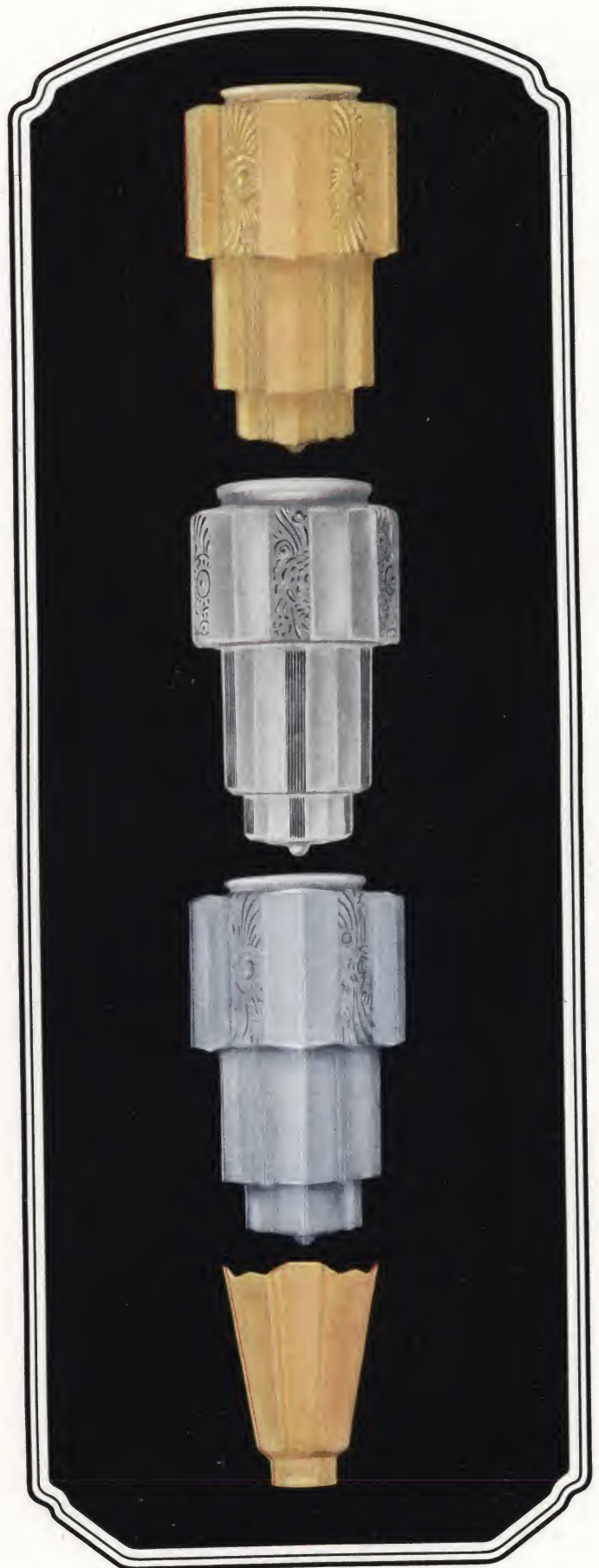
*Lamp position—Represents the distance in inches of the lamp contact above or below the plane of the fitter screws in the fixture.

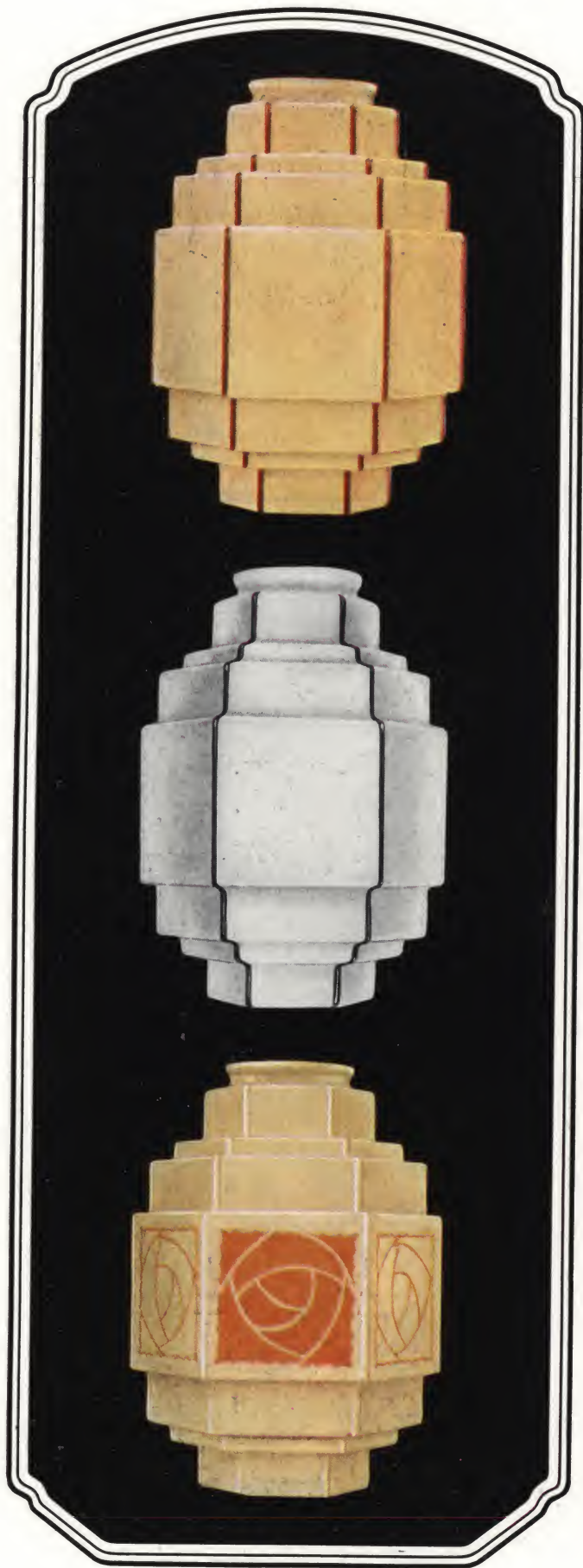
Note: Due to the very large size and great weight of globe No. 5697 safety should be insured by means of auxiliary support such as an inside safety holder, ring and chains, rods or other safety devices recommended by the fixture manufacturer.

Upright Bracket Shade

Supplied in same glass and finishes as "The Modernistic" globes.

Mould No.	Description	Diameter, in.	Height, in.	Outside diameter of heel, in.	Recommended wattage
2324	D-144 Cremax	4½	5½	1¾	25-50-60
2324	Art Moderne	4½	5½	1¾	25-50-60
2324	D-144 Monax	4½	5½	1¾	25-50-60





“The Cubistic”

Again modernism with cubist influence and the double “set back.” Simplicity is the keynote of this design which is suitable for almost any location where modernistic lighting is desired.

In the table below, D-120 indicates a leaded effect upon the vertical ribs of the globe—black is used with Monax globes and brown with Cremax. K-309 indicates a brown modernistic decoration in negative and positive etching on alternate panels. All colors are permanently fired on the glass.

To Specify

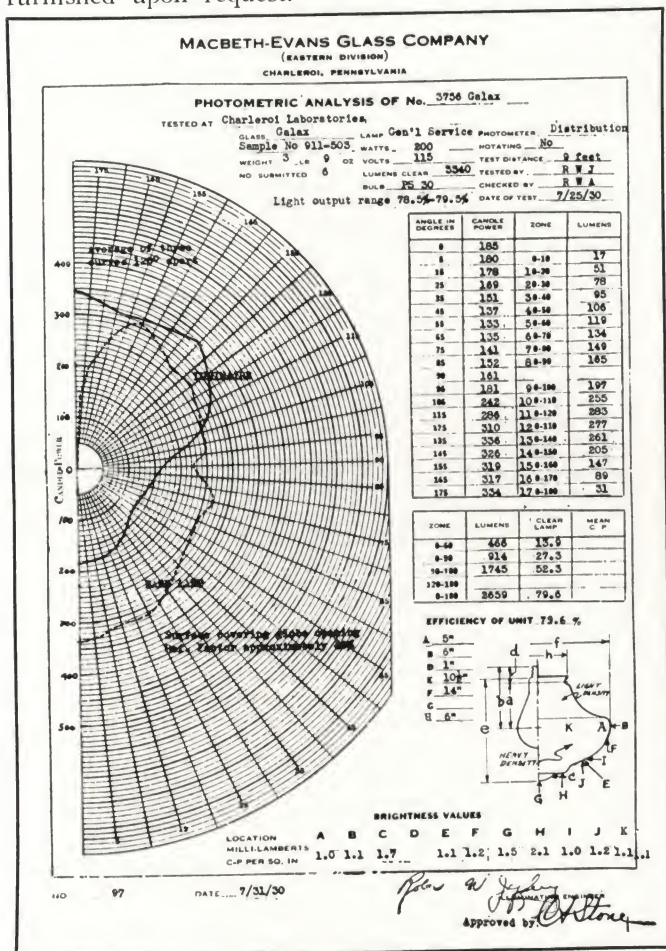
The architect should write into his own specification the data under the headings “Mould No.” and “Description.” This will automatically assure the selected style, size, color, glass and decoration. For example, “Macbeth Cubistic 5677 D-120 Monax” will designate the decoration shown in Monax with black vertical lines upon a globe 12 in. in diameter, 16 $\frac{3}{8}$ -in. in depth and with a 6-in. fitter diameter.

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, below, in.	Recommended wattage
5676	D-120 Cremax	9 $\frac{1}{4}$	12 $\frac{1}{2}$	4	2	100
5677	D-120 Cremax	12	16 $\frac{3}{8}$	6	2 $\frac{1}{2}$	200
5678	D-120 Cremax	14	19	6	2 $\frac{1}{2}$	300
5676	D-120 Monax	9 $\frac{1}{4}$	12 $\frac{1}{2}$	4	2	100
5677	D-120 Monax	12	16 $\frac{3}{8}$	6	2 $\frac{1}{2}$	200
5678	D-120 Monax	14	19	6	2 $\frac{1}{2}$	300
5676	K-309 Cremax	9 $\frac{1}{4}$	12 $\frac{1}{2}$	4	2	100
5677	K-309 Cremax	12	16 $\frac{3}{8}$	6	2 $\frac{1}{2}$	200
5678	K-309 Cremax	14	19	6	2 $\frac{1}{2}$	300

*Lamp position—Represents the distance in inches of the lamp contact below the plane of the fitter screws in the fixture.

"The Semi-indirect Hallstadt"

The Semi-indirect Hallstadt, manufactured from Macbeth Galax Glass, was designed to utilize most effectively the upward component of light reflected from the dense white reflecting lower portion of the globe. It is freely transmitted through the light opacity slightly diffusing upper section of the globe, its freedom unhampered by restricting angles. Below is shown a reproduction of Electrical Testing Laboratories' report on 3756 Galax. The results obtained from this test are representative for all sizes. Additional data will be furnished upon request.

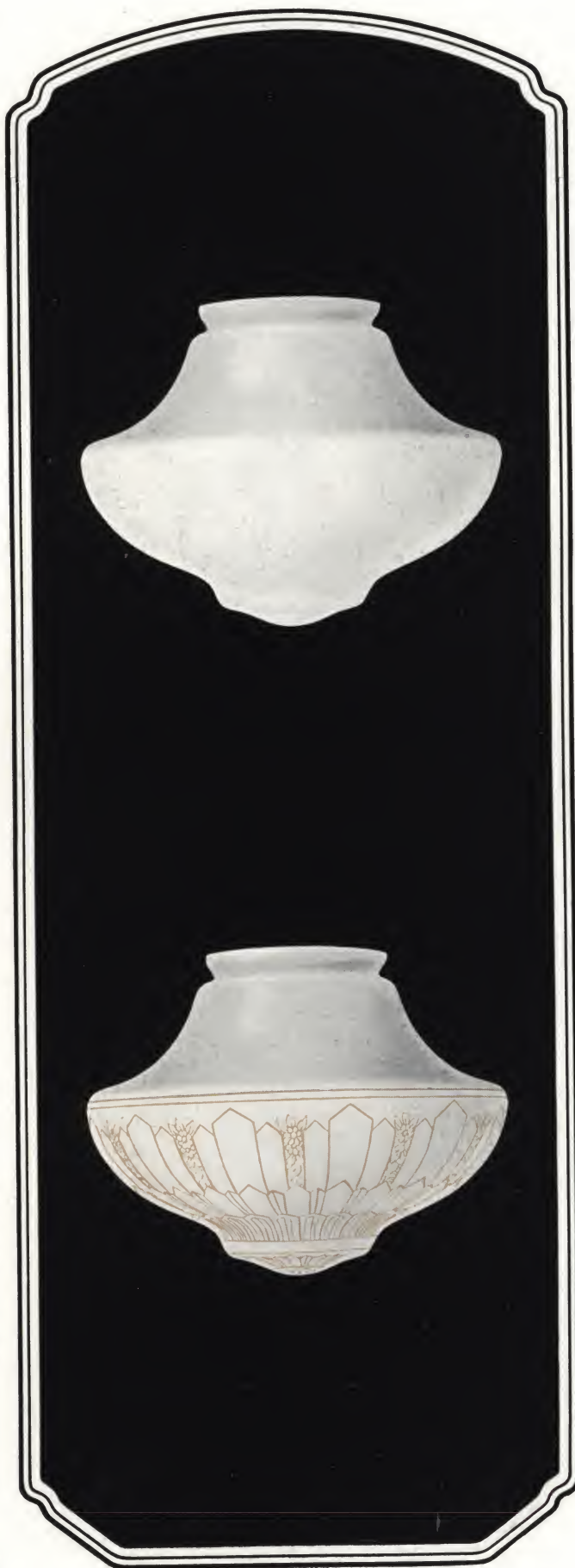


To Specify

The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Semi-Indirect 4309A Galax." The light etched decoration shown in the lower illustration may be obtained in brown or gray fired colors in all sizes by adding K-325 and the color desired, after the mould number. For example, "3756 K-325 Galax Gray 14 in."

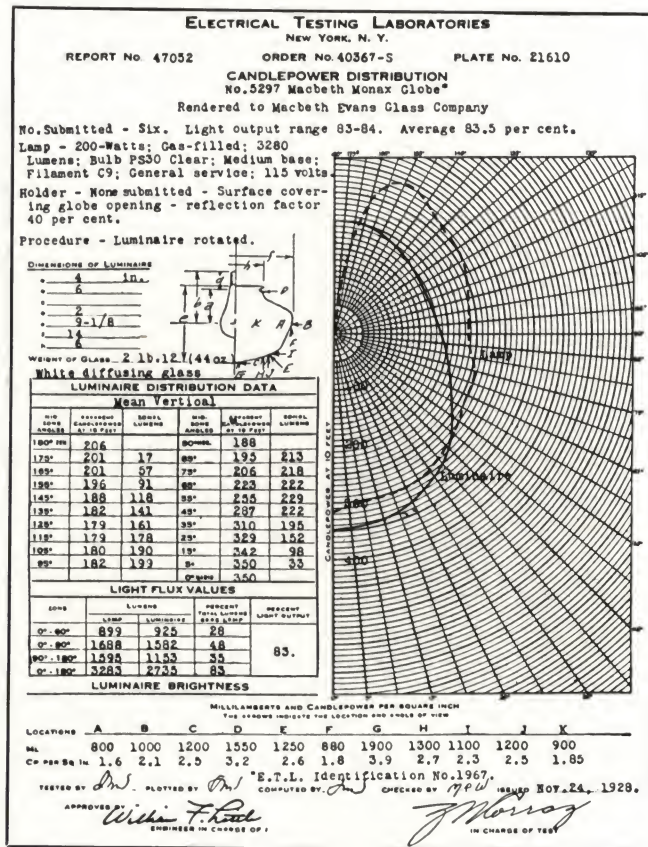
Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
4385	Galax	10	7 5/8	4	1 1/2	100
4309	Galax	12	9 1/2	6	1 1/4	150
4309A	Galax	12	9 1/2	4	1 1/4	150
3756	Galax	14	10	6	1	200
4386	Galax	16	12	6	1	300
5667	Galax	18	13 1/8	8	zero	500
4385	K-325 Galax	10	7 5/8	4	1 1/2	100
4309	K-325 Galax	12	9 1/2	6	1 1/4	150
4309A	K-325 Galax	12	9 1/2	4	1 1/4	150
3756	K-325 Galax	14	10	6	1	200
4386	K-325 Galax	16	12	6	1	300
5667	K-325 Galax	18	13 1/8	8	zero	500

*Lamp position—Indicates the distance in inches of the lamp contact above the plane of the fitter screws in the fixture. Zero indicates the lamp contact is in the same plane as the fitter screws in the fixture.



"The Seville"

The Seville may be obtained in all sizes in Monax or Cremax glass, both plain and decorated. Below is shown a reproduction of Electrical Testing Laboratories' report on 5297 Monax which is representative for all sizes in Monax glass, tested according to the IES-NELA specifications.



To Specify

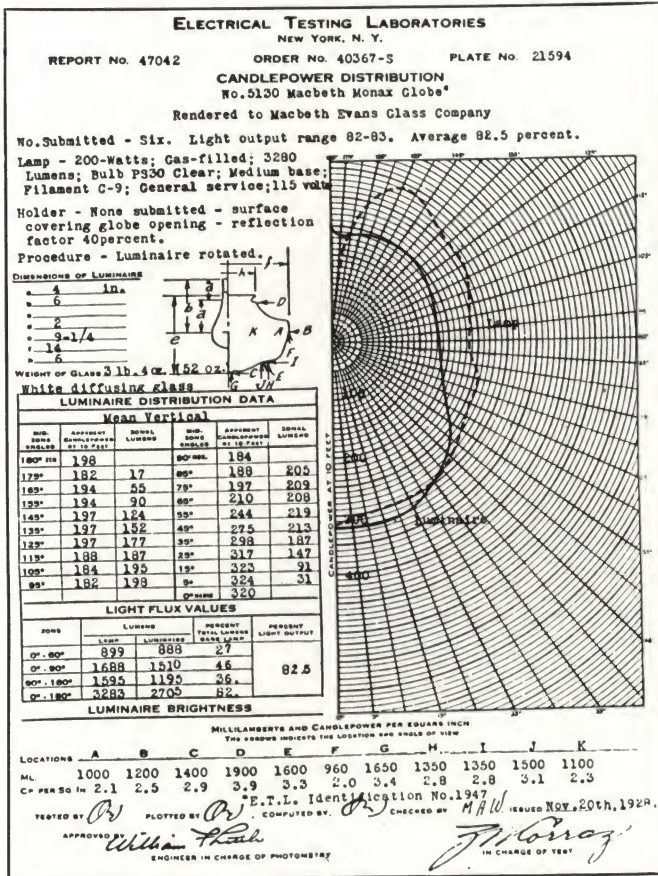
The architect should write into his own specification data tabulated below under headings "Mould No." and "Description," thus, "Macbeth Seville 5340 Cremax." The brown printed decoration with color permanently fired in the glass as shown in third illustration may be applied to all sizes in either Monax or Cremax glass by adding J-103 and glass desired after the mould number. For example, "Macbeth Seville 5297 J-103 Monax 14 in." The banded decoration shown in lower illustration may be applied to all sizes in blue, green, brown or gray by adding D-56 and color desired. For example, "Macbeth Seville 5296 D-56 Cremax Brown 12x6 in."

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
5294A	Monax or Cremax	8 1/2	5 5/16	4	1 1/2	100
5340	Monax or Cremax	9	6 1/2	4	1 1/2	100
5295	Monax or Cremax	10	6 1/2	4	1 1/2	100
5296	Monax or Cremax	12	7 3/4	6	2	150
5296A	Monax or Cremax	12	7 3/4	4	1 1/2	150
5297	Monax or Cremax	14	9	6	2	200
5298	Monax or Cremax	16	10 1/4	6	2	300
5645	Monax or Cremax	18	11 3/8	8	3	500
5666	Monax or Cremax	20	12 3/4	8	3	750
5294A	J-103 Monax or Cremax	8 1/2	5 5/16	4	1 1/2	100
5340	J-103 Monax or Cremax	9	6 1/2	4	1 1/2	100
5295	J-103 Monax or Cremax	10	6 1/2	4	1 1/2	100
5296	J-103 Monax or Cremax	12	7 3/4	6	2	150
5296A	J-103 Monax or Cremax	12	7 3/4	4	1 1/2	150
5297	J-103 Monax or Cremax	14	9	6	2	200
5298	J-103 Monax or Cremax	16	10 1/4	6	2	300
5645	J-103 Monax or Cremax	18	11 3/8	8	3	500
5666	J-103 Monax or Cremax	20	12 3/4	8	3	750
5294A	D-56 Monax or Cremax	8 1/2	5 5/16	4	1 1/2	100
5340	D-56 Monax or Cremax	9	6 1/2	4	1 1/2	100
5295	D-56 Monax or Cremax	10	6 1/2	4	1 1/2	100
5296	D-56 Monax or Cremax	12	7 3/4	6	2	150
5296A	D-56 Monax or Cremax	12	7 3/4	4	1 1/2	150
5297	D-56 Monax or Cremax	14	9	6	2	200
5298	D-56 Monax or Cremax	16	10 1/4	6	2	300
5645	D-56 Monax or Cremax	18	11 3/8	8	3	500
5666	D-56 Monax or Cremax	20	12 3/4	8	3	750

*Lamp position—Represents distance in inches of lamp contact above plane of fitter screws in fixture.

"The Florentine"

The Florentine in a complete range of sizes may be obtained in Monax or Cremax glass, plain and decorated. Below is shown a reproduction of Electrical Testing Laboratories' report on 5130 Monax, tested according to the IES-NELA specifications. Results obtained from this test are representative for all sizes in Monax glass. Additional data will be furnished upon request.



To Specify

The architect should write into his own specification data tabulated below under headings "Mould No." and "Description," thus, "Macbeth Florentine 5122 Monax." The brown printed decoration with color permanently fired on glass as shown in third illustration may be applied to all sizes in either Monax or Cremax glass by adding J-104 and glass desired after mould number. For example, "Macbeth Florentine 5123-A J-104 Cremax 12x4." The brown light etched Gothic fired color decoration as shown in lower illustration may be applied to all sizes by adding K-1080 after mould number—for example, "Macbeth Florentine 5138 K-1080 Monax 18 in."

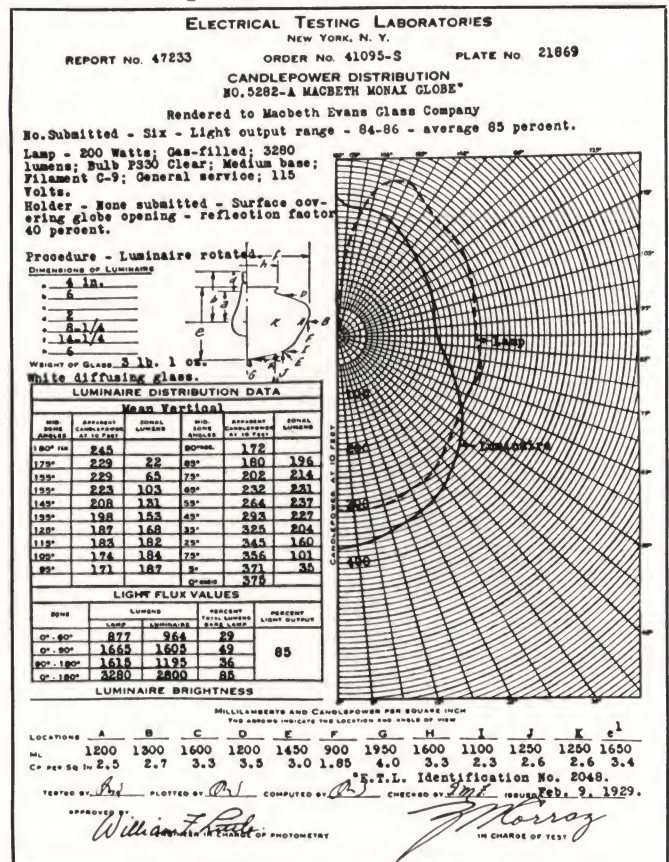
Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
5122	Monax or Cremax	9	5 7/8	4	1 1/2	100
5123	Monax or Cremax	12	7 5/8	6	2	150
5123A	Monax or Cremax	12	7 5/8	4	1 1/2	150
5130	Monax or Cremax	14	9 3/8	6	2	200
5133	Monax or Cremax	16	10 1/4	6	2	300
5138	Monax or Cremax	18	11 1/2	8	3	500
5122	J-104 Monax or Cremax	9	5 7/8	4	1 1/2	100
5123	J-104 Monax or Cremax	12	7 5/8	6	2	150
5123A	J-104 Monax or Cremax	12	7 5/8	4	1 1/2	150
5130	J-104 Monax or Cremax	14	9 3/8	6	2	200
5133	J-104 Monax or Cremax	16	10 1/4	6	2	300
5138	J-104 Monax or Cremax	18	11 1/2	8	3	500
5122	K-1080 Monax or Cremax	9	5 7/8	4	1 1/2	100
5123	K-1080 Monax or Cremax	12	7 5/8	6	2	150
5123A	K-1080 Monax or Cremax	12	7 5/8	4	1 1/2	150
5130	K-1080 Monax or Cremax	14	9 3/8	6	2	200
5133	K-1080 Monax or Cremax	16	10 1/4	6	2	200
5138	K-1080 Monax or Cremax	18	11 1/2	8	3	500

*Lamp position—Represents distance in inches of lamp contact above plane of fitter screws in fixture.



"The Cataldo"

The Cataldo may be obtained in all sizes in Monax glass, plain or decorated. This design is standard equipment for the lighting of New York City Public Schools. Below is the Electrical Testing Laboratories' report on 5282A Monax, which is representative for all sizes, tested according to IES-NELA specifications.



To Specify

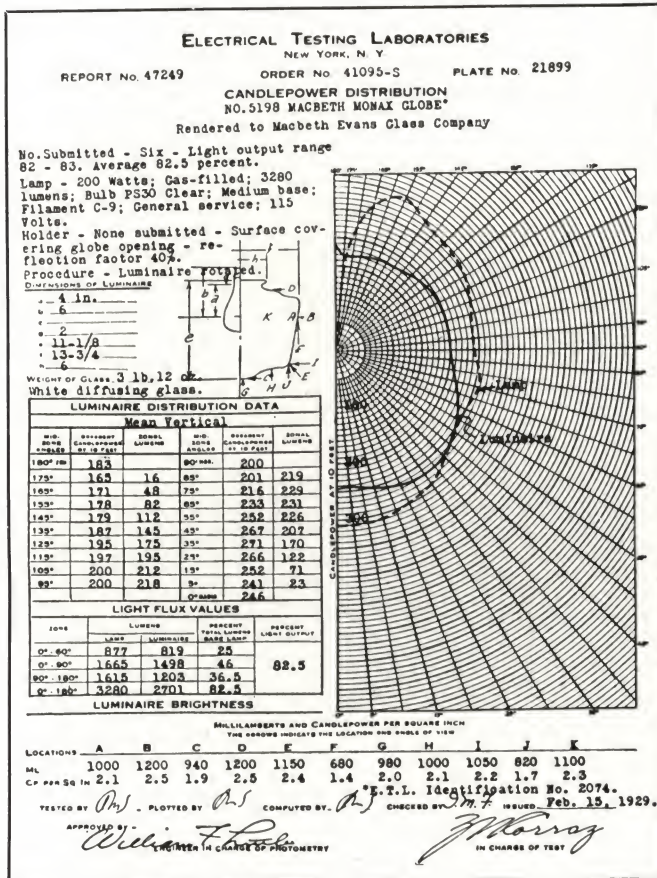
The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Cataldo 5282-A Monax." The light etched two tone decoration permanently fired on the glass as shown in the center illustration may be applied to all sizes by adding K-313 after the mould number. For example, "Macbeth Cataldo 5270 K-313 16 in." The lined decoration in bottom illustration, in blue, brown, gray or green fired colors, may be applied to all sizes by adding D-121 after the mould number. For example, "Macbeth Cataldo 5326 D-121 Gray 9 in."

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
5263	Monax	8 1/2	5 1/2	4	1 1/4	100
5326	Monax	9	6	4	1 1/2	100
5268	Monax	10	6 3/4	4	1 1/2	100
5269	Monax	12	7 3/4	6	2	150
5269A	Monax	12	7 3/4	5	1 1/2	150
5269B	Monax	12	7 3/4	4	1 1/2	150
5282	Monax	14	8 3/8	5	2	200
5282A	Monax	14	8 3/8	6	2	200
5270	Monax	16	10	6	2	300
5263	K-313 Monax	8 1/2	5 1/2	4	1 1/4	100
5326	K-313 Monax	9	6	4	1 1/2	100
5268	K-313 Monax	10	6 3/4	4	1 1/2	100
5269	K-313 Monax	12	7 3/4	6	2	150
5269A	K-313 Monax	12	7 3/4	5	1 1/2	150
5269B	K-313 Monax	12	7 3/4	4	1 1/2	150
5282	K-313 Monax	14	8 3/8	5	2	200
5282A	K-313 Monax	14	8 3/8	6	2	200
5270	K-313 Monax	16	10	6	2	300
5263	D-121 Monax	8 1/2	5 1/2	4	1 1/4	100
5326	D-121 Monax	9	6	4	1 1/2	100
5268	D-121 Monax	10	6 3/4	4	1 1/2	100
5269	D-121 Monax	12	7 3/4	6	2	150
5269A	D-121 Monax	12	7 3/4	5	1 1/2	150
5269B	D-121 Monax	12	7 3/4	4	1 1/2	150
5282	D-121 Monax	14	8 3/8	5	2	200
5282A	D-121 Monax	14	8 3/8	6	2	200
5270	D-121 Monax	16	10	6	2	300

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture

"The Ravenna"

The Ravenna, in a complete range of sizes, may be obtained in Monax glass, plain or decorated. Below is shown a reproduction of Electrical Testing Laboratories' report on 5198 Monax, tested according to the IES-NELA specifications. The results obtained from this test are representative for all sizes. Additional data will be furnished upon request.



To Specify

The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Ravenna 5179 Monax 8 in." The brown light etched decoration shown in the lower illustration, with color permanently fired on the glass, may be applied to all sizes by adding the number K-314 after the mould number. For example, "Macbeth Ravenna 5179 K-314 Monax 8 in."

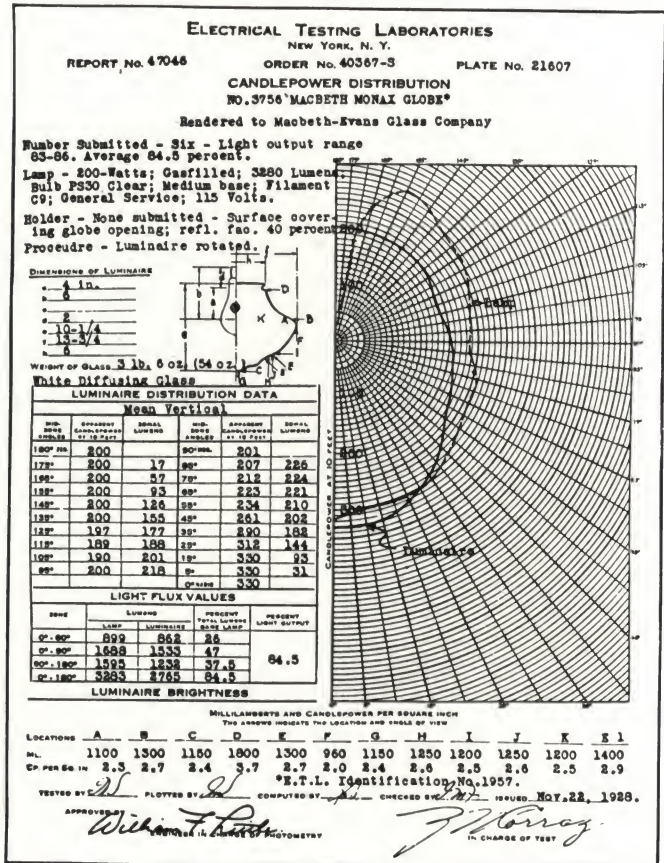
Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
5179	Monax	8	6	4	1 1/2	100
5881	Monax	9	6 3/4	4	1 1/2	100
5196	Monax	10	7 1/2	6	2	100
5196A	Monax	10	7 1/2	4	1 1/2	100
5197	Monax	12	9 1/2	6	2	150
5197A	Monax	12	9 1/2	4	1 1/2	150
5198	Monax	14	11 1/4	6	2	200
5199	Monax	14	12 3/4	6	2	300
5179	K-314 Monax	8	6	4	1 1/2	100
5881	K-314 Monax	9	6 3/4	4	1 1/2	100
5196	K-314 Monax	10	7 1/2	6	2	100
5196A	K-314 Monax	10	7 1/2	4	1 1/2	100
5197	K-314 Monax	12	9 1/2	6	2	150
5197A	K-314 Monax	12	9 1/2	4	1 1/2	150
5198	K-314 Monax	14	11 1/4	6	2	200
5199	K-314 Monax	14	12 3/4	6	2	300

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture.



"The Hallstadt"

The Hallstadt, in a complete range of sizes, may be obtained in Monax or Cremax glass, plain or decorated. Below is shown a reproduction of Electrical Testing Laboratories' report on 3756 Monax, tested according to IES-NELA specifications. The results obtained from this test are representative for all sizes in Monax glass. Additional data will be furnished upon request.



To Specify

The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Hallstadt 4309 Monax." The brown printed decoration with color permanently fired on the glass as shown in the bottom illustration may be applied to all sizes by adding the number J-95 after the mould number. For example, "Macbeth Hallstadt 3756 J-95 Cremax 14."

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
4385	Monax or Cremax	10	7 5/8	4	1 1/2	100
4309	Monax or Cremax	12	9 1/2	6	2	150
4309A	Monax or Cremax	12	9 1/2	4	1 1/2	150
3756	Monax or Cremax	14	10	6	2	200
4386	Monax or Cremax	16	12	6	2	300
5667	Monax or Cremax	18	13 1/2	8	3	500
4385	J-95 Monax or Cremax	10	7 5/8	4	1 1/2	100
4309	J-95 Monax or Cremax	12	9 1/2	6	2	150
4309A	J-95 Monax or Cremax	12	9 1/2	4	1 1/2	150
3756	J-95 Monax or Cremax	14	10	6	2	200
4386	J-95 Monax or Cremax	16	12	6	2	300
5667	J-95 Monax or Cremax	18	13 1/2	8	3	500

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture.

The Norman, in a complete range of sizes, may be obtained in Monax glass, plain or decorated. Below is shown a reproduction of Electrical Testing Laboratories' report on 5290 Monax. The results obtained from this test are representative for all sizes. Additional data will be furnished upon request.

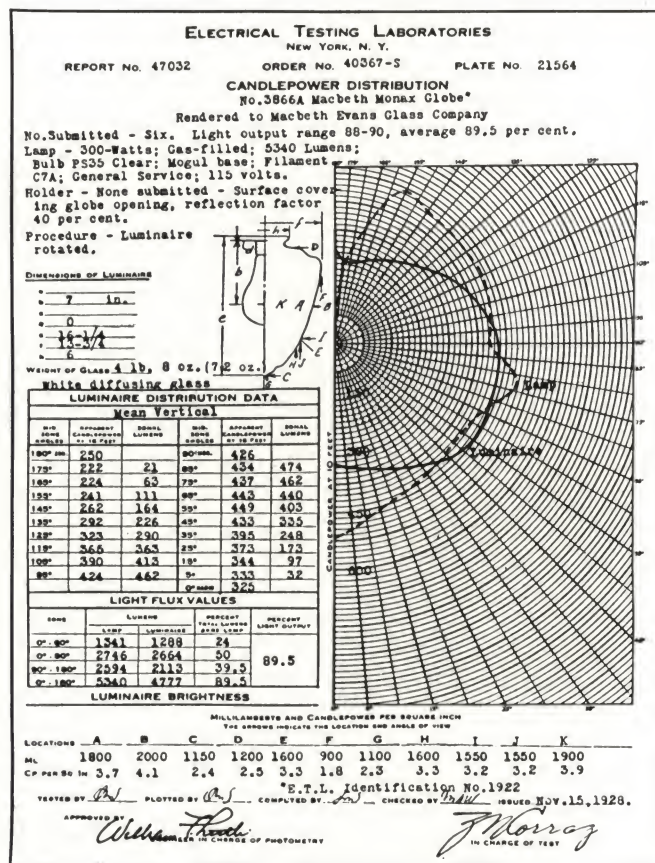


The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Norman 5274 Monax 12x6 in." The brown printed decoration with color permanently fired on the glass as shown in lower illustration may be applied to all sizes by adding the number J-105 after the mould number. For example, "Macbeth Norman 5291 J-105 Monax 16 in."

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture.

"The Acorn"

The Acorn, in a complete range of sizes, may be obtained in plain or decorated Monax glass. Below is shown a reproduction of Electrical Testing Laboratories' report on 3866A Monax, tested according to IES-NELA specifications. The results obtained from this test are representative for all sizes. Additional data will be furnished upon request.



To Specify

The architect should write into his own specification the data tabulated below under the headings "Mould No." and "Description," thus, "Macbeth Acorn 3869 Monax." The light etched decorations with colors permanently fired on the glass may be applied to all sizes. For the center decoration add K-181 after the mould number. For example, "Macbeth Acorn 3870 K-181 Monax Gray." K-181 may be ordered in either gray or brown. For the bottom decoration which is furnished in brown or gray add K-307. For example, "Macbeth Acorn 3866-A K-307 Monax Brown."

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position	Recommended wattage
3870	Monax	8	9 5/8	4	zero	100
3864	Monax	10	11 3/8	6	zero	150
3869	Monax	12	14	6	zero	200
3866A	Monax	14	16 1/4	6	zero	300
3870	K-181 Monax	8	9 5/8	4	zero	100
3864	K-181 Monax	10	11 3/8	6	zero	150
3869	K-181 Monax	12	14	6	zero	200
3866A	K-181 Monax	14	16 1/4	6	zero	300
3870	K-307 Monax	8	9 5/8	4	zero	100
3864	K-307 Monax	10	11 3/8	6	zero	150
3869	K-307 Monax	12	14	6	zero	200
3866A	K-307 Monax	14	16 1/4	6	zero	300

*Lamp position—Zero under the heading "lamp position" indicates that the lamp contact should be in the same plane with the fitter screws of the fixture.

"The Gothic"

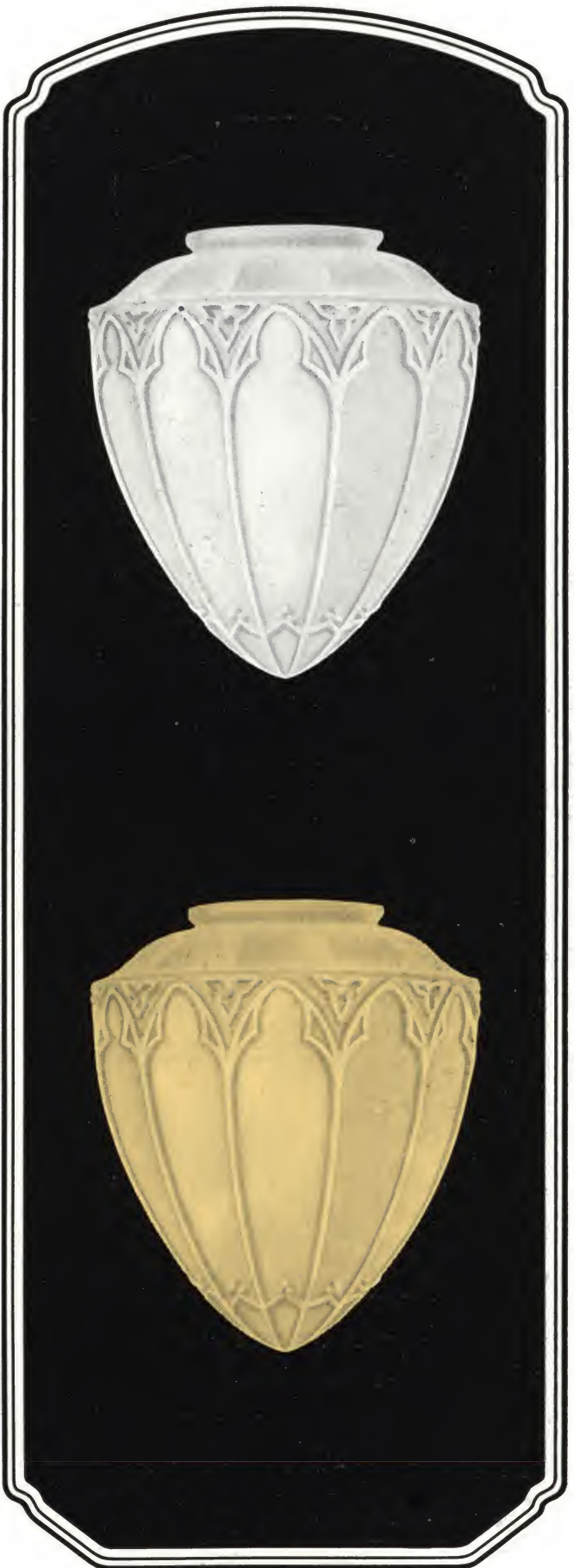
The Gothic, especially suitable for church lighting, is available in a complete range of sizes in both Monax and Cremax glass.

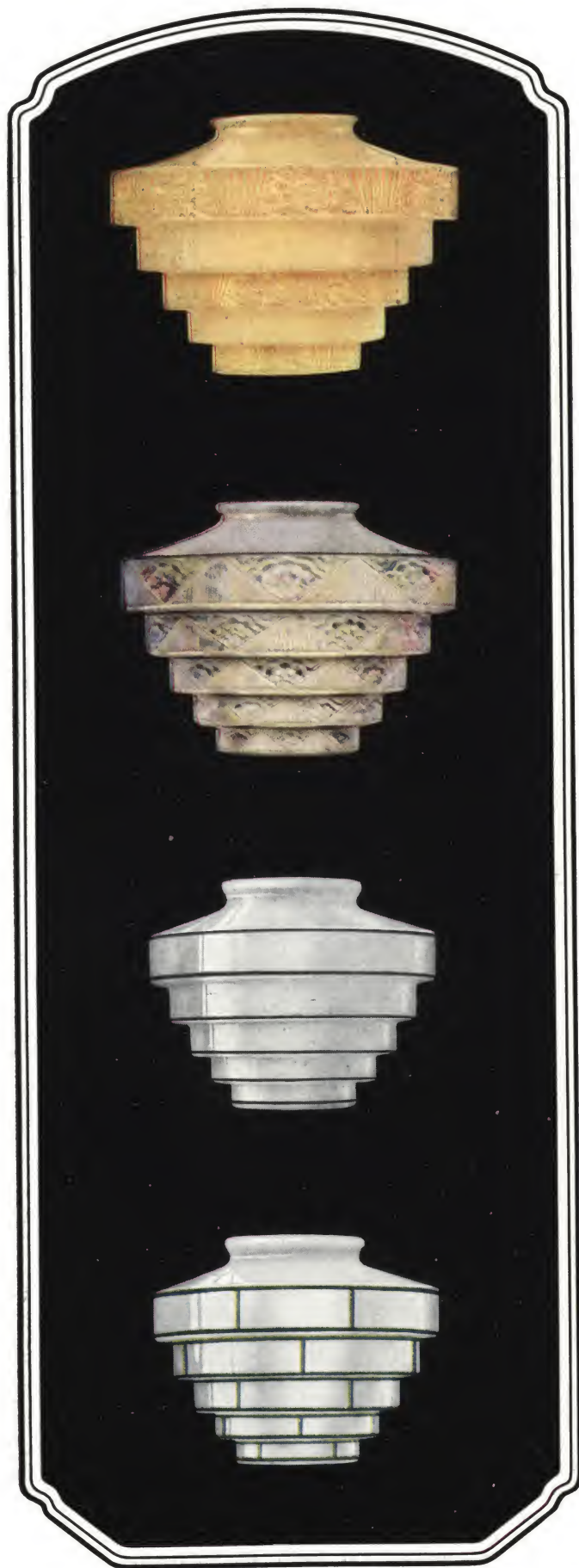
To Specify

The architect should write into his own specification the data tabulated under the headings "Mould No." and "Description," thus, "Macbeth Gothic 3804 Monax" (or Cremax if the more colorful glass is desired).

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
3801	Monax	6	6 $\frac{5}{8}$	3 $\frac{1}{4}$	$\frac{1}{2}$	60
3802	Monax	8	8 $\frac{7}{8}$	4	zero	100
3803	Monax	10	11 $\frac{1}{4}$	5	zero	150
3804	Monax	12	13 $\frac{1}{2}$	6	zero	200
3805A	Monax	14	15 $\frac{1}{2}$	6	zero	300
3801	Cremax	6	6 $\frac{5}{8}$	3 $\frac{1}{4}$	$\frac{1}{2}$	60
3802	Cremax	8	8 $\frac{7}{8}$	4	zero	100
3803	Cremax	10	11 $\frac{1}{4}$	5	zero	150
3804	Cremax	12	13 $\frac{1}{2}$	6	zero	200
3805A	Cremax	14	15 $\frac{1}{2}$	6	zero	300

*Lamp position—Represents distance in inches of the lamp contact above the plane of the fitter screws in the fixture. Zero indicates same plane as the fitter screws.





"The Terrell"

(Original)

Etched and Decorated in Colors

Distinctly "moderne" design by Miss Maude P. Terrell, erstwhile dramatic artist whose success in selling artistic lighting effects has been definitely established in metropolitan New York. This globe in Cremax glass is used in lighting the American Woman's Association Building recently completed in New York.

In the table below K-308 indicates a lightly etched and permanently fired brown decoration on Cremax globes; E-3, a deeply etched modernistic design on crystal iridescent globes; D-121, lines of blue, green, brown or black fired colors around the steps of either Monax or Cremax globes; D-143, a tile decoration in green, brown, blue or black fired colors applied to Monax or Cremax globes.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description" for the particular globe desired. This will automatically assure the selected style, size, color, glass and decoration. For example, "Macbeth Terrell 5651-D-121 Cremax Black" will designate a Cremax globe, 14 in. in diameter, 10³/₁₆ in. deep with a fitter 6 in. in diameter, the globe decorated with black lines permanently fired on the glass.

Note: MACBETH-EVANS GLASS COMPANY is licensed by M. P. Terrell to manufacture and sell "The Terrell Globes" under U. S. Patent 77794.

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position, above, in.	Recommended wattage
5649	K-308 Cremax	8	6 ¹ / ₁₆	4	1 ¹ / ₂	100
5652	K-308 Cremax	10	7 ⁵ / ₈	4	1 ¹ / ₂	100
5653	K-308 Cremax	12	9	6	2	150
5653A	K-308 Cremax	12	9	4	1 ¹ / ₂	150
5651	K-308 Cremax	14	10 ³ / ₁₆	6	2	200
5654	K-308 Cremax	16	11 ¹ / ₂	6	2	300
5649	E-3 Crystal Etched	8	6 ¹ / ₁₆	4	1 ¹ / ₂	100
5652	E-3 Crystal Etched	10	7 ⁵ / ₈	4	1 ¹ / ₂	100
5653	E-3 Crystal Etched	12	9	6	2	150
5653A	E-3 Crystal Etched	12	9	4	1 ¹ / ₂	150
5651	E-3 Crystal Etched	14	10 ³ / ₁₆	6	2	200
5654	E-3 Crystal Etched	16	11 ¹ / ₂	6	2	300
5649	D-121 Monax or Cremax	8	6 ¹ / ₁₆	4	1 ¹ / ₂	100
5652	D-121 Monax or Cremax	10	7 ⁵ / ₈	4	1 ¹ / ₂	100
5653	D-121 Monax or Cremax	12	9	6	2	150
5653A	D-121 Monax or Cremax	12	9	4	1 ¹ / ₂	150
5651	D-121 Monax or Cremax	14	10 ³ / ₁₆	6	2	200
5654	D-121 Monax or Cremax	16	11 ¹ / ₂	6	2	300
5649	†D-143 Monax or Cremax	8	6 ¹ / ₁₆	4	1 ¹ / ₂	100

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture.

†D-143 tile decoration regularly supplied in the 8-in. size only.

"The Terrell"

(Original)

Plain

The Terrell design in plain Monax and Cremax globes with auxiliary equipment in electric shades and close ceiling bowls. The shades and bowls as indicated in the table below are furnished plain and with K-308, E-3 and D-121 and D-143 decorations (see previous page). No. 2266 shades may be used on either upright or inverted brackets. No. 5646 bowls may be used advantageously under balconies where low ceilings necessitate the use of a hinged ceiling band. D-121 and D-143 decorations are furnished in green, brown, blue or black.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description" for the particular glass desired. This will automatically assure the selected style, color, glass and decoration. For example, "Macbeth Terrell Shade 2266 K-308 Cremax" will designate a Cremax shade with 2¼-in. fitter and brown modernistic fired color decoration to match globe on page 17. Macbeth 5646 E-3 will designate Crystal iridescent ceiling bowl with deep etched modernistic design to match globe on page 17.

Note: MACBETH-EVANS GLASS COMPANY is licensed by M. P. Terrell to manufacture and sell "The Terrell Globes" under U. S. Patent 77794.

Mould No.	Description	Diam. in.	Depth. in.	Fitter diam. in.	*Lamp position, above, in.	Recommended wattage
2266	Monax or Cremax	4	4¼	2¼		25 to 60
2266	K-308 Cremax	4	4¼	2¼		25 to 60
2266	E-3 Crystal Etched	4	4¼	2¼		25 to 60
2266	D-121 Monax or Cremax	4	4¼	2¼		25 to 60
2266	D-143 Monax or Cremax	4	4¼	2¼		25 to 60
5646	Monax or Cremax	10	4½			60 to 100
5646	K-308 Cremax	10	4½			60 to 100
5646	E-3 Crystal Etched	10	4½			60 to 100
5646	D-121 Monax or Cremax	10	4½			60 to 100
5649	Monax or Cremax	8	6½	4	1½	100
5652	Monax or Cremax	10	7½	4	1½	100
5653	Monax or Cremax	12	9	6	2	150
5653A	Monax or Cremax	12	9	4	1½	150
5651	Monax or Cremax	14	10¾	6	2	200
5654	Monax or Cremax	16	11½	6	2	300

*Lamp position—Represents the distance in inches of the lamp contact above the plane of the fitter screws in the fixture.





Romanesque Stalactites and Shallow Bowls in Cremax Glass

Romanesque stalactites in a variety of sizes are especially suitable for church lighting. They are regularly supplied only in Cremax glass.

In the table below you will note that the shallow bowls may be secured in plain or iridescent Cremax; D-121 Black fired color lines; K-300 decoration, a light etching in black with touches of red fired colors; K-301 light etched design in brown fired color. The bowls will be drilled with a $\frac{1}{2}$ -in. hole in the center for supporting stem unless other drilling is specified.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description" for the particular glass desired. This will automatically assure the selected style, size, color, glass and decoration. For example, "Macbeth Romanesque Stalactite 4683 Cremax" will designate a Cremax stalactite with 6-in. diameter, 11-in. depth and fitter diameter of 6 in., or "Macbeth Shallow Bowl 5013 K-300 Cremax" will designate a Cremax bowl 14 in. in diameter, $4\frac{1}{8}$ in. in depth with K-300 light etched decoration and $\frac{1}{2}$ -in. hole drilled in the center of the bottom.

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	Recommended wattage
2346	Cremax Stalactite	4	6	4	60
4468	Cremax Stalactite	4	8	4	100
4682	Cremax Stalactite	5	$9\frac{1}{2}$	5	100
4683	Cremax Stalactite	6	11	6	150
4686	Cremax Stalactite	7	14	7	200
4684	Cremax Stalactite	8	16	8	300
4685	Cremax Stalactite	9	14	9	200
4691	Cremax Stalactite	9	18	9	500
4695	Cremax Stalactite	10	20	10	750
4999	Cremax Bowl	10	$3\frac{1}{8}$		100
5012	Cremax Bowl	12	$3\frac{3}{4}$		100
5013	Cremax Bowl	14	$4\frac{1}{16}$		150
5014	Cremax Bowl	16	5		200
4999	Cremax, iridescent Bowl	10	$3\frac{1}{8}$		100
5012	Cremax, iridescent Bowl	12	$3\frac{3}{4}$		100
5013	Cremax, iridescent Bowl	14	$4\frac{1}{16}$		150
5014	Cremax, iridescent Bowl	16	5		200
4999	D-121 Cremax Bowl	10	$3\frac{1}{8}$		100
5012	D-121 Cremax Bowl	12	$3\frac{3}{4}$		100
5013	D-121 Cremax Bowl	14	$4\frac{1}{16}$		150
5014	D-121 Cremax Bowl	16	5		200
4999	K-300 Cremax Bowl	10	$3\frac{1}{8}$		100
5012	K-300 Cremax Bowl	12	$3\frac{3}{4}$		100
5013	K-300 Cremax Bowl	14	$4\frac{1}{16}$		150
5014	K-300 Cremax Bowl	16	5		200
4999	K-301 Cremax Bowl	10	$3\frac{1}{8}$		100
5012	K-301 Cremax Bowl	12	$3\frac{3}{4}$		100
5013	K-301 Cremax Bowl	14	$4\frac{1}{16}$		150
5014	K-301 Cremax Bowl	16	5		200

"The Dijon"

The Dijon, a lantern of interesting design, may be obtained in three sizes. Three distinctive decorations on Cremax glass may be applied to all sizes. The colors are permanently fired on the glass.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description" for the particular globe desired. This will automatically assure the selected size and decoration. For example, "Macbeth Dijon 4454 K-291 Cremax" indicates a lantern $7\frac{1}{2} \times 10\frac{3}{8} \times 4$ in. decorated as shown in the top illustration. "Macbeth Dijon 4470 K-284 Cremax" indicates a lantern $10 \times 13\frac{7}{8} \times 6$ in. with the decoration shown in the center illustration and "Macbeth Dijon 4477 K-108 Cremax" indicates a lantern $12 \times 16\frac{1}{2} \times 6$ in. with the Gothic decoration shown in the bottom illustration. All decorations are lightly etched on the glass.

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	*Lamp position	Recommended wattage
4454	K-291 Cremax	$7\frac{1}{2}$	$10\frac{3}{8}$	4	zero	100
4470	K-291 Cremax	10	$13\frac{7}{8}$	6	zero	200
4477	K-291 Cremax	12	$16\frac{1}{2}$	6	zero	300
4454	K-284 Cremax	$7\frac{1}{2}$	$10\frac{3}{8}$	4	zero	100
4470	K-284 Cremax	10	$13\frac{7}{8}$	6	zero	200
4477	K-284 Cremax	12	$16\frac{1}{2}$	6	zero	300
4454	K-108 Cremax	$7\frac{1}{2}$	$10\frac{3}{8}$	4	zero	100
4470	K-108 Cremax	10	$13\frac{7}{8}$	6	zero	200
4477	K-108 Cremax	12	$16\frac{1}{2}$	6	zero	300

*Lamp position—Zero indicates that the lamp contact is in the same plane as the fitter screws of the fixture.





Monax, Cremax and Alba Shades

The first three illustrations represent No. 4221 half shades, particularly suitable for bath rooms. The fourth illustration from the top, the ever popular Mission Bell shade in four sizes; the fifth illustration, another popular shade of bowl type available in three sizes. The three lower illustrations, pressed shades of Alba translucent glass—first the bell type with scalloped edge available in five sizes, the shallow type available in three sizes, and the bell type with plain edge available in four sizes.

To Specify

The architect should write into his own specification the data under the headings "Mould No." and "Description." This will automatically assure the correct style, size, color, decoration and glass. Half shade No. 4221 is available in Monax or Cremax plain. D-121 lined decoration in blue, green or brown on Monax or Cremax glass, and banded decoration D-56 in blue, green or brown on Monax or Cremax glass. All colors are permanently fired on the glass. Specifications should read, for example, "Macbeth 4221 D-121 Monax Blue"; "Macbeth 4221 D-56 Cremax Green"; "Macbeth 1623-A Monax Bowl Type"; "Macbeth 3431 Alba Flat Type."

Mould No.	Description	Diam., in.	Depth, in.	Fitter in.	Recommended wattage
4221	Monax or Cremax, half shade	6	3 $\frac{1}{2}$	2 $\frac{1}{4}$	40
4221	D-121 Monax or Cremax, half shade	6	3 $\frac{1}{2}$	2 $\frac{1}{4}$	40
4221	D-56 Monax or Cremax, half shade	6	3 $\frac{1}{2}$	2 $\frac{1}{4}$	40
1358	Monax, mission bell	4 $\frac{1}{2}$	4 $\frac{1}{8}$	2 $\frac{1}{4}$	25
1391	Monax, mission bell	6	4 $\frac{1}{4}$	2 $\frac{1}{4}$	40
1460	Monax, mission bell	7	4 $\frac{1}{2}$	2 $\frac{1}{4}$	50
1461	Monax, mission bell	8	5	2 $\frac{1}{4}$	60
5307	Monax, bowl type	6 $\frac{1}{4}$	4 $\frac{3}{4}$	2 $\frac{1}{4}$	40
1623-A	Monax, bowl type	7	5	2 $\frac{1}{4}$	50
5308	Monax, bowl type	8	5 $\frac{3}{4}$	2 $\frac{1}{4}$	60
3419	Alba, scalloped bottom	5 $\frac{1}{8}$	3 $\frac{5}{8}$	2 $\frac{1}{4}$	25
3420	Alba, scalloped bottom	5 $\frac{3}{4}$	4 $\frac{5}{8}$	2 $\frac{1}{4}$	40
3424	Alba, scalloped bottom	7 $\frac{1}{4}$	4 $\frac{3}{4}$	2 $\frac{1}{4}$	50
3429	Alba, scalloped bottom	8 $\frac{1}{4}$	6	2 $\frac{1}{4}$	60
3446	Alba, scalloped bottom	10 $\frac{5}{16}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	100
3431	Alba, flat type	7 $\frac{3}{4}$	3 $\frac{1}{2}$	2 $\frac{1}{4}$	50
3432	Alba, flat type	9	3 $\frac{5}{8}$	2 $\frac{1}{4}$	60
3438	Alba, flat type	11	4 $\frac{3}{8}$	2 $\frac{1}{4}$	100
3816	Alba, plain bottom	6 $\frac{5}{8}$	4 $\frac{1}{8}$	2 $\frac{1}{4}$	40
3817	Alba, plain bottom	7 $\frac{1}{4}$	4 $\frac{1}{4}$	2 $\frac{1}{4}$	50
3818	Alba, plain bottom	8 $\frac{1}{2}$	5 $\frac{5}{8}$	2 $\frac{1}{4}$	60
3819	Alba, plain bottom	10 $\frac{1}{4}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	100

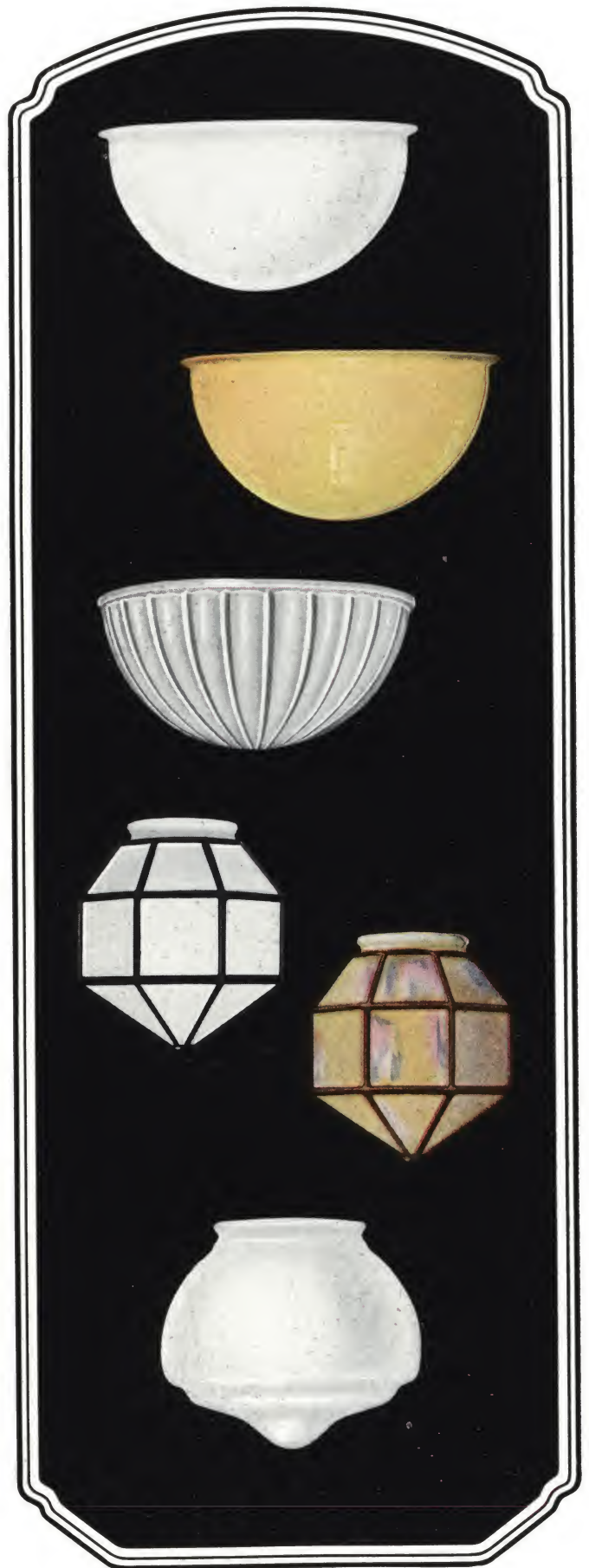
Monax, Cremax and Alba Hemispheres and Porch Globes

The first two illustrations in the panel show blown lip type hemispheres in Monax and Cremax. They are for use particularly in close ceiling bands and are available in three popular sizes. The third hemisphere is in pressed, ribbed, Alba glass and available in five sizes. No. 4261 ribbed porch globes may be secured in Monax glass with black lines or Cremax Iridescent glass with brown lines permanently fired on the glass. The bottom illustration shows an enclosing globe of rather staple design in plain Monax, primarily intended for commercial lighting. There are three sizes.

To Specify

The architect should write into his own specification the data under the headings, "Mould No." and "Description." This will automatically assure the correct style, size, color, decoration and glass. Blown hemispheres in Monax or Cremax are covered by Nos. 175, 165 and 160-A. Pressed ribbed Alba hemispheres are covered by Nos. 3484, 5382, 5383, 5385 and 3461. Ribbed porch globes, No. 4261, should be written in thus: "Macbeth 4261 D-120 Cremax Iridescent," or "Macbeth 4261 D-120 Monax." The commercial globe in bottom illustration would be specified thus: "Macbeth 2482 Monax 10."

Mould No.	Description	Diam., in.	Depth, in.	Fitter diam., in.	Recommended wattage
175	Monax or Cremax	8	4		60
165	Monax or Cremax	10	5		100
160-A	Monax or Cremax	12	6		150
3484	Alba	8	4		60
5382	Alba	10	5		100
5383	Alba	12	6		150
5385	Alba	14	7		200
3461	Alba	16	8		300
4261	D-120 Monax	6 $\frac{1}{4}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	60
4261	D-120 Cremax iridescent	6 $\frac{1}{4}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	60
5183	Monax	8	7 $\frac{1}{2}$	4	100
2482	Monax	10	9	6	100
5184	Monax	12	10 $\frac{3}{4}$	6	150



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